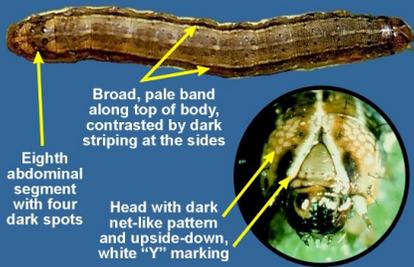


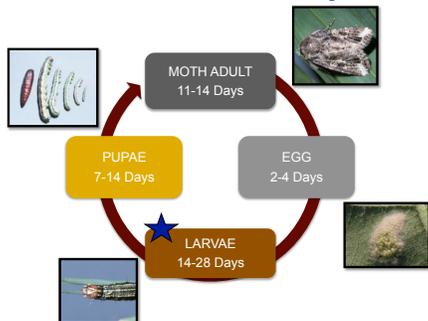
Forage Pest Management Updates

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Fall Armyworm Identification



Fall Armyworm: LIFE CYCLE 35-61 Days





Feeding habits of FAW



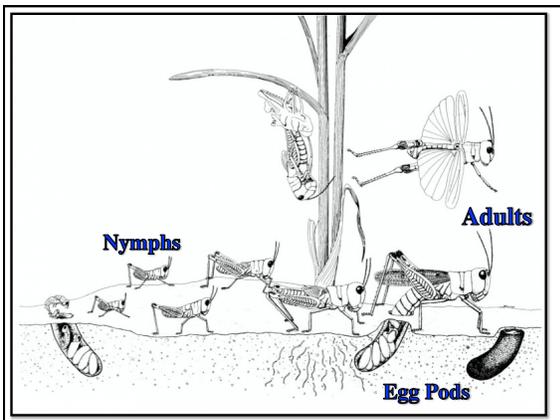


Treatment decisions for FAW



- Pastures rule-of-thumb treatment level is 3 + per square foot
- 3 FAW/sq foot consume 30% leaf area of good stand of coastal bermudagrass
- Consider cost to treat, forage value, forage needs





Grasshoppers

- Involve more than one species
 - 150 Species in Texas
- Eggs laid in grassy ditches, roadsides, and rangeland
 - 30/yard will eat 1 ton of vegetation in 10 days
 - Eat ½ their weight each day
- Main factor affecting populations: WEATHER
 - Dry weather increases survival
 - Warm falls allow more time to feed and lay eggs
- Destroy vegetation indiscriminately
 - Individual species have preferences

Five Most Wanted



Migratory



Differential



Two-striped



Packard



Red-legged

2011



Insecticides Labeled for Pastures and Hayfields

- Malathion .57% and Malathion ULV
 - 0 days to harvest or graze
- Mustang Max (9.6% zeta-cypermethrin)*
 - 0 days for forage and hay
 - 7 days for straw and seed screenings
- Sevin 4F, Sevin XLR, Sevin 80S, Generic Carbaryl
 - 14 day waiting period
- Dimilin 2L (diflubenzuron)*
 - Wait 1 day until harvest
 - MUST be applied BEFORE larvae reach ½" or longer
 - Residual control for up to 2-3 weeks, as long as forage is not removed
 - Insect growth regulator

Insecticides Labeled for Pastures and Hayfields

- Karate (Lambda-cyhalothrin) *
 - 1.28-1.92 oz/acre
 - Do not cut forage for hay until 7 days after last application
- Baythroid XL (beta-cyfluthrin) *
 - 2.6-2.8 oz/acre
 - 0 day grazing or harvest restrictions
- Lambda-Cy*
 - 2.56-3.84 oz/ac
 - 0 day grazing/7 day hay harvest restriction
- Tombstone (cyfluthrin)*
 - No restrictions
 - Pyrethroid
 - 2.6-2.8 oz/acre (\$390/gallon) ~ \$8/acre



Rynaxypyr

- Product names: Prevathon 5%; Coragen 18.4%
- Unique chemistry: muscle paralysis
- Grazing and haying interval is 0 days
- General use pesticide
- Good coverage is important
- Add methylated seed oil as adjuvant

Bermudagrass stem maggot
(Atherigona reversura)

- Native to south Asia (from Japan westward to Pakistan)
- First reported in the US in Georgia in 2010
- Pest only infests bermudagrass and stargrass (*Cynodon* spp.)
- Van Zandt, Comanche, Waller, Bastrop, and Lavaca

Bermudagrass Stem Maggot

- The fly (yellow with black head) lays its eggs within the stem of the bermudagrass plant.
- Maggot, (white with black head, 1/8" – 3/16" long) moves to the last plant node and eats the plant material within the stem.
- Stem damage results in the death of the top 2 - 3 leaves
- Appearance of frost damage.



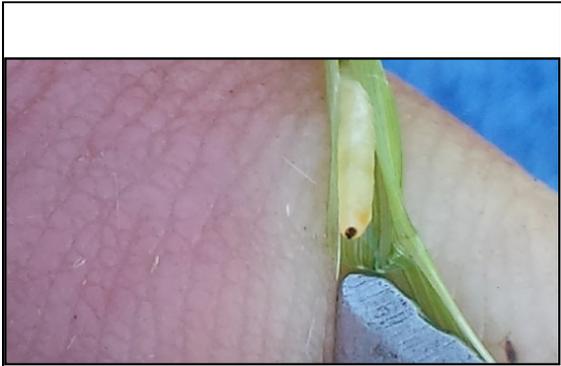


Photo courtesy of Joe Janal







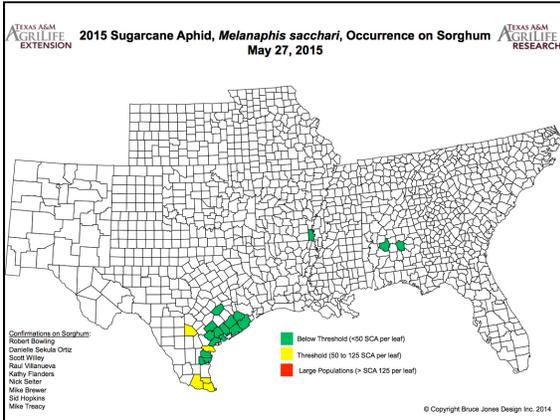
Management

- **Hay meadow:**
 - Harvest hay as soon as possible to reduce the yield impact.
- **Pesticide:**
 - Foliar application of any pyrethroid (beta-cyfluthrin, cyfluthrin, lambda-cyhalothrin and zeta cypermethrin) insecticide labeled for bermudagrass can control the bermudagrass stem maggot.
- Guidelines on the economic return on controlling this new pest and timing of and frequency of insecticide treatments have not been clearly defined.

Sugarcane Aphid

- Feeds on underside of leaves.
- Produces great quantities of honeydew.
- Sticky leaves and plants gum up combines at harvest.
- <http://txscan.blogspot.com>





Treatment

	Sivanto 200SL	Transform WG
Use rate for SA	4-7 oz/acre	0.75-1.5 oz/acre
Minimum interval between applications	7 days	14 days
Minimum application volume	10 GPA by ground 2 GPA by air	Full plant coverage by ground 5 GPA by air
Maximum rate per year	28 oz per acre	3.0 oz per acre, 2 applications
Pre-harvest interval	21 days for dried grain or straw or stover 7 days for grazing, forage, fodder or hay harvest	14 days for grain or straw, 7 days for grazing or forage, fodder or hay harvest
Restricted entry	4 hours	24 hours

Methods of Weed Control

- Manage pasture for maximum production
 - Soil pH and fertility maintained
 - Grazing pressure
- Mowing (mechanical)
- Herbicide application



Herbicides

- **Restricted or State-Limited**
 - 2,4-D
 - GrazonNext HL
 - Grazon P+D
 - Cimarron Max
 - Tordon 22K
 - Dicamba (Banvel)
 - Weedmaster
 - PasturAll HL
 - PastureGard HL
 - 2,4-DB
 - Crossbow
 - Weedar 64
 - Weedone LV6
- **Non-Restricted**
 - Milestone
 - Chaparral
 - Redeem R&P
 - Spike 20P
 - Spike 80DF
 - Vista XLT
 - Cimarron Extra
 - Cimarron Plus
 - Remedy Ultra
 - Reclaim
 - VelPar L
 - Amber
 - Pastora
 - Sendero

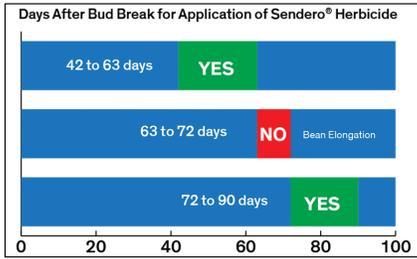


Sendero



- Aminopyralid + clopyralid
- Not a restricted use pesticide
- Mesquite control
- Do not apply more than 1.75 pts/acre per annual growing season.

Timing is key



Grassburs / Sandburs

- Negative effect on hay quality
 - Reduces value
- Warm season perennial (can survive from one year to the next)
- Weak stand of desired forage = grassbur can take advantage
- Most important control:
 - Proper management of desired forage



Pre-Emergence Grassbur Control



PROWL H₂O
herbicide

For weed control in winter dormant Bermudagrass pasture and hay fields

- 2-3 Qt/acre while Bermudagrass is still dormant
- Apply 45 days prior to grazing or 60 days prior to harvest

Post-Emergence GrassBur Control

DuPont™ Pastora®
herbicide
for bermudagrass pastures
For a difference you can see




3 leaf grassbur with seed bur attached.



Grassbur with multiple tillers.

1-1.5 oz/acre. No more than 2.5 oz/acre within a year.
No grazing or haying restrictions.



Pasture Herbicides to Consider

- Legume Program
 - 2,4-D
 - Weedmaster
 - Outlaw (Agri Star)
 - Range Star (Agri Star)
 - Generic Weedmaster
- Non-Legume Program
 - Pastora (DuPont)
 - GrazonNext (Dow)
 - Milestone (Dow)
 - Grazon P+D (Dow)
 - Gunslinger (Agri Star)
 - Generic Grazon P+D
 - Cimarron (any; Du Pont)
 - Redeem (Dow)
 - Clopyralid + Triclopyr



Fence Row

- 1% Grazon P+D
- ¼ % Remedy Ultra
- ¼% NIS (80% ai)
 - All in water.
 - Wet all foliage to glisten on both sides of fence row
 - Allow brush to stand for 12 months prior to removal.
 - Stay away from desirable trees (2 drip lines)
- 1-2% Surmount mixture (same NIS level...always except with glyphosate)
 - Same application
 - Same 12 month waiting period



The screenshot shows the Forage Fax website interface. At the top, the URL is <http://foragefax.tamu.edu>. Below the navigation bar, there are links for Events, Useful Links, and Publications. The main content area features an article titled "It's Time to Get a Soil Sample Analyzed" with a sub-headline "Soil Test! Soil Test! Soil Test! Soil Test!". A blue arrow points to a "SUBSCRIBE" form box on the right side of the article. The form contains the text "Enter your email address:" followed by an input field and a "Subscribe" button. Below the form, it says "Delivered by FeedBurner".

Enter email address in the above box to receive emails when new information is posted.
